

Notice of Allowability

Application No.

09/782,681

Applicant(s)

LEE ET AL.

Examiner

Siegfried E. Chencinski

Art Unit

3628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 26 April 2006.
2. ☒ The allowed claim(s) is/are 1-49.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


FRANTZY POINVIL
PRIMARY EXAMINER

Au 3692

DETAILED ACTION

1. EXAMINER'S AMENDMENT:

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Michael A. Glenn on April 9, 2007.

Claim 31 has been amended to read --- A system for scoring a transaction, the system comprising:

storing means storing a plurality of stored profiles, each profile associated with a key for one of a plurality of key fields of a transaction, the key fields including at least one key field that does not reliably identify a purchaser of a transaction, each profile including summary variables summarizing all transactions having a same key for at least one of the key fields; and

a processor processing a statistical model that receives as inputs a transaction, a plurality of profiles, each profile summarizing transactions associated with a key for a key field, and at least one contrast measure that weights selected pairs of the profiles, and that produces a fraud score indicating the likelihood of fraud in the transaction. ---

Claim 36 has been amended to read --- A system for developing a statistical model of online transactions, comprising:

a database storing transactions from a plurality of different online merchants, the transactions for a plurality of different purchasers, each transaction indicated as being fraudulent or non-fraudulent;

first generating means generating for each of a plurality of key fields of the transaction--including at least one key field for which all of the possible keys of the key field do not reliably uniquely identify a purchaser of the transaction--a profile for all of the transactions having a matching key for the key field, such that at least one profile summarizes the transactions of a plurality of different individuals;

second generating means for generating a contrast measure comparing the summary variables of at least two of the profiles; and

training means training a statistical model to generate a score for a transaction, the score indicative of a likelihood that the transaction is fraudulent, by using as training inputs to the statistical model selected transactions, the profiles associated with the keys of the key fields of each selected transaction, and the contrast measures associated with the profiles. ---

Allowable Subject Matter

2. Claims 1-49 are allowed.

3. The following is a statement of reasons for the indication of allowable subject matter:

Re. Claim 1, Pettitt is the closest prior art to Applicant's invention found by the examiner. Pettitt does not disclose or suggest generating a contrast measure comparing the summary variables of at least two of the profiles and the examiner does not see it as obvious for an ordinary practitioner at the time of applicant's invention to have seen a contrast measure and a summary variable.

Re. Claims 15 & 36, Pettitt is the closest prior art to Applicant's invention found by the examiner. Pettitt does not disclose or suggest generating a contrast measure comparing the summary variables of at least two of the profiles and the examiner does not see it as obvious for an ordinary practitioner at the time of applicant's invention to have seen a contrast measure and a summary variable.

Re. Claim 19, Pettitt is the closest prior art to Applicant's invention found by the examiner. Pettitt does not disclose "computing at least one contrast measure for a summary variable included in the set of profiles". This limitation is viewed by the examiner as allowable because it does not appear that the ordinary practitioner would find a contrast measure and a summary variable obvious in the context of fraud detection evaluation model disclosed by Pettitt.

Re. Claims 28 & 35, Pettitt does not disclose or suggest summary profiles. The examiner does not see it as obvious for an ordinary practitioner at the time of applicant's invention to have seen summary profiles as obvious in the context of fraud detection evaluation model disclosed by Pettitt.

Re. Claim 29, Pettitt does not disclose summary profiles and summary variables. The examiner does not see it as obvious for an ordinary practitioner at the time of applicant's invention to have seen a summary profiles and a summary variable.

Re. Claim 30, Pettitt does not disclose a summary variable in the generation of a fraud score. The examiner does not see it as obvious for an ordinary practitioner at the time of applicant's invention to have seen a summary variable.

Re. Claim 31, Pettitt does not disclose summary profiles and contrast variables. The examiner does not see it as obvious for an ordinary practitioner at the time of applicant's invention to have seen a summary profile, a summary variable and a contrast measure.

Re. Claim 33, Pettitt does not disclose a statistical model built in a supervised learning environment. The examiner does not see it as obvious for an ordinary practitioner at the time of applicant's invention to have seen a supervised learning environment.

Re. Claim 37, Pettitt does not disclose or suggest generating a contrast measure in the generation of a fraud score and the examiner does not see it as obvious for an ordinary practitioner at the time of applicant's invention to have seen a contrast measure.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Siegfried Chencinski whose telephone number is 571-272-6792. The Examiner can normally be reached Monday through Friday, 9am to 6pm. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Richard E. Chilcot, can be reached on (571) 272-6777.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

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Commissioner of Patents and Trademarks, Washington D.C. 20231

or faxed to:


(571) 273-8300 [Official communications; including After Final
communications labeled "Box AF"]

(571) 273-6792 [Informal/Draft communications, labeled
"PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to the address found on the above
USPTO web site in Alexandria, VA.

SEC

April 11, 2007


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